



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of )  
Yoshito TSUMURAYA ) Group Art Unit: 1793  
Application No.: 10/568,315 ) Examiner: VERONICA FAISON GEE  
Filed: February 16, 2006 ) Confirmation No.: 2979  
For: WATER-BASED INK COMPOSITION AND BALLPOINT PEN USING THE SAME

DECLARATION PURSUANT TO 37 C.F.R. § 1.132

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Yoshito TSUMURAYA, declare the following:

1. I am the inventor of the subject matters described and claimed in the above-identified application.
2. I am a graduate of Chiba University, Graduate School Science and Technology.
3. I have been employed by Mitsubishi Pencil Co., Ltd. since April 2, 2000 and have been conducting research and development in the field of water-based ink until the present time.
4. I am familiar with the prosecution of the present application, particularly the Official Action notified on April 9, 2008 in which the Examiner rejected the claims in the above-identified application under 35 U.S.C. 103(a) over a reference of the prior art.
5. The following experiment was carried out by me.

### Experiment

Water-based ink composition Comparative Examples were prepared according to formulation shown in the following Table 1, and evaluated in the same manner as described in Examples of the specification of the present application.

The results are shown in Table 2.

Table 1

Blend Components	Remarks)	Comparative Example	
		8	9
Rhamsan gum		0.2	0.4
Coloring agent A	1	5	
Coloring agent B	2		7
Coloring agent C	3	7	
Propylene glycol		10	
Glycerin			15
Surfactant	4	0.3	0.3
Aminomethylpropanol		0.5	
Triethanolamine			1.2
Benzotriazole		0.2	0.2
1,2-Benzisothiazoline		0.3	0.3
Joncryl J62	5	1	
Joncryl 7001	6		
Water (refined water)		82.5	75.6

Remark 1) : Carbon Black MA-100 (manufactured by Mitsubishi Chemical corporation)

Remark 2) : Water RED I (manufactured by Orient Chemical Industries Ltd.)

Remark 3) : Water Blue 9 (manufactured by Orient Chemical Industries Ltd.)

Remark 4) : Phosphanol RB-410 (manufactured by Toho Chemical Industry Co., Ltd.)

Remark 5) : Joncryl J62 (manufactured by Johnson Polymer Corporation)

Remark 6) : Joncryl 7001 (manufactured by Johnson Polymer Corporation)

Table 2

	Comparative Example	
	8	9
<After left standing at 50°C for 1 month		
Writing property	○	△
Ink continuous flowability	△	○
<After left standing at 5°C for 1 month		
Writing property	△	△
Ink continuous flowability	△	○

As the data in the above Tables 1 and 2 show, Comparative Examples 8 and 9, which contain a polysaccharide represented by the cited reference, exhibit the unsatisfactory results.

It should be noted that the ink composition of Comparative Example 8 is inferior in the writing property at 5°C and the ink continuous flowability, and that the ink composition of Comparative Example 9 is inferior in the writing property at 50°C and 5°C.

In view of the foregoing, Applicant respectfully submit that claim 1 and 2 is not obvious over U.S. Patent 6,458,192 and JP 04-214782 in combination.

6. I further declare that all statements made herein of my own knowledge are true and that all statements on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

Date: June 9, 2008

By: 岡谷 禮人

Yoshito TSUMURAYA  
(Print Declarant's name)